

FLORA MALESIANA SERIES II - FERNS AND FERN ALLIES, VOLUME 3 (Polypodiaceae, Davalliaceae, Azollaceae, Cheiroleuriaceae, Equisetaceae, Matoniaceae, Plagiogyriaceae), edited by C. Kalkman and H. P. Nooteboom, vi + 1–334 pp. (1998). Rijksherbarium, P. O. Box 9514, 2300 RA Leiden, The Netherlands.

This new volume of series II of Flora Malesiana on Ferns and Fern Allies contains revised treatments of seven families of Malesian pteridophytes by various authors. The families revised are as follows: Polypodiaceae by P. H. Hovenkamp *et al.*, pp. 1–234; Davalliaceae by H. P. Nooteboom, pp. 235–276; Azollaceae by R. M. K. Saunders, pp. 277–284; Cheiroleuriaceae and Equisetaceae by J. E. Leferrière, pp. 285–286 & 287–288; Matoniaceae by M. Kato, pp. 289–294; and Plagiogyriaceae by X.-C. Zhang and H. P. Nooteboom, pp. 295–316.

A two-page abstract precedes the volume and an index to the scientific plant names concludes it. The format of the new pteridophyte volume is similar to that of the new volumes of seed plants in series I. Compared to the old format, the layout of paragraphs in the new volume runs across the entire page width, instead of forming two columns. The font size of the print is also bigger, which makes the reading of the text easier.

For each family, one sees a general description, followed by a concise discussion of the distribution, morphology, habitat and ecology, chromosomes and taxonomy, and at times, economic importance. The same categories of information are repeated for the genera and species. Well-constructed, dichotomous keys to genera and species within the family, extensive synonymy, taxonomic bibliography and accurate illustrations are also provided. For speciose and difficult genera, such as *Microsorium* and *Selliguea*, separate keys to the species known from a large island and country, or from an island group, are provided.

Because of the number of included taxa, the family Polypodiaceae, with 18 genera and 183 species, easily becomes the main feature of this large volume, to be followed by Davalliaceae (3 genera and 31 species) and Plagiogyriaceae (one genus and 7 species), in terms of family size. The rest of the families treated are either monotypic or oligotypic. Important taxonomic ideas put forth in the new volume include the generic fusion between *Humata* and *Davallia*, *Pyrrosia* and *Drymoglossum*, *Crypsinus* and *Selliguea*, and also, *Phymatosorus* and *Microsorium*. The supportive arguments justifying a broad concept for these genera have been published previously by the authors and are not repeated in volume 3. On the other hand, several traditionally accepted small genera, such as *Photinopteris* (= *Aglaomorpha*), *Thayeria* (= *Aglaomorpha*), *Merinthosorus* (= *Aglaomorpha*), *Schellolepis* (= *Goniophlebium*) and *Araiostegia*

(=*Davallia*) are not recognized by the authors of this volume. No taxonomic novelty is described in the new volume. *Aglaomorpha acuminata* (Willd.) Hovenkamp is published as a nomenclatural novelty.

The present volume, with its updated revision, is truly a handy source of taxonomic information for the seven families of Malesian ferns treated. Being an occasional student of Malesian fern taxonomy, I find the discussion on the family morphology and relationship, as well as the many taxonomic comments scattered through the pages, very educational and enlightening.

However, I miss the selected distribution maps of plant taxa so elegantly reproduced in early volumes of this series. To me, these range maps provide an effective visual aid to our understanding of the dispersal and evolution of the Malesia flora. Future volumes of series II should perhaps consider the inclusion of distribution maps of selected pteridophytes to illustrate the biogeographical highlights of Malesian fern flora.

Undoubtedly, the usefulness of a flora revision lies in its inclusiveness of the taxa found locally and its workability with the specimens collected from the area. Judging by the text presentation, especially the wording of the dichotomous keys and the illustrations, the new volume appears to be another excellent and useful guidebook to the correct identification of Malesian ferns. Both the authors and the editors of this new volume are to be congratulated for a difficult job well done.

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